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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/594,765	06/16/2000	Yehuda Binder	BINDER=9	1885
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Browdy and Neimark PLLC 624 Ninth Street N W Washington, DC 20001-5303			EXAMINER YAO, KWANG BIN	
			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/594,765

Applicant(s)

BINDER, YEHUDA

Examiner

Kwang B. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-84 is/are pending in the application.
- 4a) Of the above claim(s) 40-58 and 68-84 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-39 and 59-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/6/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 79-84 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Invention disclosed in claims 21-39, 59-67 and Invention disclosed in claims 79-84 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In this instant case, Invention disclosed in claims 21-39, 59-67 has separate utility of having time-domain multiplexed digitized voice channel, etc...; and while the Invention disclosed in claims 79-84 has separate utility of “said data port, said transceiver, said converter and said voice connector are all housed in said single enclosure, said enclosure is attachable to the outlet cavity”. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 79-84 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 21-24, 27-34, 37-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US 6,747,995).

Brown et al. discloses a system for multiple voice lines over single subscriber loop comprising the following features: regarding claim 21, a module (Figs. 1 and 6, DERIVED VOICE MODEM 108) for coupling a telephone device (Figs. 1 and 6, telephone 110a) to at least one time-domain multiplexed digitized voice channel (column 8, lines 58-67; column 11, lines 1-3) carried over a wiring (Figs. 1 and 6, wiring 109) having at least two conductors, the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) comprising: a modem (Fig. 6, DSP 604; column 12, lines 15-16) operative to couple to the signal carried over the wiring (Figs. 1 and 6, wiring 109); selective means (Fig. 6, PROC 601) coupled to said modem (Fig. 6, DSP 604; column 12, lines 15-16) and operative to pass a first voice channel; a subscriber line interface (Fig. 6, SLIC 600a) coupled to said selective means (Fig. 6, PROC 601) and operative to convert said first voice channel to a first analog telephone signal; and a first telephone connector coupled to said subscriber line interface (Fig. 6, SLIC 600a) and couplable to a telephone device (Figs. 1 and 6, telephone 110a) to couple the telephone device (Figs. 1 and 6, telephone 110a) to said first

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analog telephone signal; regarding claim 22, wherein at least part of the wiring (Figs. 1 and 6, wiring 109) is existing wiring (Figs. 1 and 6, wiring 109) in a building; regarding claim 23, wherein the wiring (Figs. 1 and 6, wiring 109) is used to concurrently carrying a service signal; regarding claim 24, wherein the wiring (Figs. 1 and 6, wiring 109) is a telephone wiring (Figs. 1 and 6, wiring 109); regarding claim 27, wherein the wiring (Figs. 1 and 6, wiring 109) concurrently carries a frequency domain multiplexed second analog telephone signal in a telephone band, and the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) further comprises: a frequency selective means (Fig. 6, PF 116) couplable to the wiring (Figs. 1 and 6, wiring 109) and operative to pass the said second analog telephone signal; and a second telephone connector (Fig. 6, PF 116) coupled to said frequency selective means (Fig. 6, PROC 601) for coupling a telephone device (Figs. 1 and 6, telephone 114) to said second analog telephone signal; regarding claim 28, wherein the multiplexed digitized voice channel (column 8, lines 58-67; column 11, lines 1-3)s carry Pulse Code Modulation PCM (ABSTRACT; COLUMN 11, LINE 44 TO COLUMN 12, LINE 32) signals; regarding claim 29, wherein the wiring (Figs. 1 and 6, wiring 109) further carry data signals, and the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) further comprises a data connector operative to couple the data signals to a data unit; regarding claim 30, a module (Figs. 1 and 6, DERIVED VOICE MODEM 108) for coupling at least one telephone service signal to at least one time-domain multiplexed digitized voice channel (column 8, lines 58-67; column 11, lines 1-3) carried over a wiring (Figs. 1 and 6, wiring 109) having at least two conductors, the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) comprising: at least one exchange line interface couplable to said at least one telephone service signal, and operative to convert said at least one telephone service signal to a

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digitized service signal, a modem (Fig. 6, DSP 604; column 12, lines 15-16) coupled to said at least one exchange line interface and operative to couple said digitized service signal to the signal carried over the wiring (Figs. 1 and 6, wiring 109); regarding claim 31, wherein the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) is used for coupling multiple service signals to multiple time-domain multiplexed digitized voice channel (column 8, lines 58-67; column 11, lines 1-3)s carried over the wiring (Figs. 1 and 6, wiring 109), and wherein the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) further comprising selective means (Fig. 6, PROC 601) coupled to said modem (Fig. 6, DSP 604; column 12, lines 15-16) and to said at least one exchange line interface and operative to selectively couple said multiple digitized voice channels carried over the wiring (Figs. 1 and 6, wiring 109) to said digitized service channels; regarding claim 32, wherein at least part of the wiring (Figs. 1 and 6, wiring 109) is existing wiring (Figs. 1 and 6, wiring 109) in a building; regarding claim 33, wherein the wiring (Figs. 1 and 6, wiring 109) is used to concurrently carrying a service signal; regarding claim 34, wherein the wiring (Figs. 1 and 6, wiring 109) is a telephone wiring (Figs. 1 and 6, wiring 109); regarding claim 37, wherein the wiring (Figs. 1 and 6, wiring 109) concurrently carries a frequency domain multiplexed analog telephone signal in a telephone band, and the module (Figs. 1 and 6, DERIVED VOICE MODEM 108) further comprises: a connection means (Fig. 6, 102) for coupling to an analog telephone service; and a frequency selective means (Fig. 6, PF 116) coupled to said connection means and couplable to the wiring (Figs. 1 and 6, wiring 109), and operative to pass the analog telephone signal; regarding claim 38, wherein the multiplexed digitized voice channel (column 8, lines 58-67; column 11, lines 1-3)s carry Pulse

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Code Modulation PCM (ABSTRACT; COLUMN 11, LINE 44 TO COLUMN 12, LINE 32)

signals.

4. Claims 59-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Frankel et al. (US 6,639,913).

Frankel et al. discloses a system for communicating voice and data over a LAN comprising the following features: regarding claim 59, For use with first and second wiring segments, each segment having at least two conductors and each segment carrying a plurality of time-domain multiplexed digitized voice channels, a module (Fig. 8 WC RDT 500 and Fig. 9) for coupling a telephone device to said wiring segments, the module (Fig. 8 WC RDT 500 and Fig. 9) comprising: first and second modems (Fig. 9, DSL modems 120) each couplable to a respective one of said first and second wiring segments and each operative to couple to a respective one of the signals carried over the first and second wiring; selective means (Fig. 9, CONTROLLER 110) coupled to said first and second modems (Fig. 9, DSL modems 120) and operative to select one voice channel ; a subscriber line interface (Fig. 9, CODEC 160 and SLIC 150) coupled to said selective means (Fig. 9, CONTROLLER 110) and operative to convert said one voice channel to a first analog telephone interface; and a first telephone connector (Fig. 9, PROTECTION CIRCUITRY) coupled to said subscriber line interface (Fig. 9, CODEC 160 and SLIC 150) and operative to couple the telephone device to said first analog telephone interface; regarding claim 60, wherein at least part of one of said wiring segments is existing wiring in a building (column 4, lines 18-20; column 12, lines 22-29); regarding claim 61, wherein at least one of said wiring segments is used to concurrently carrying a service signal (column 7, lines 54-

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55; column 8, lines 14-15); regarding claim 62, wherein at least one of said wiring segments is a telephone wiring (column 5, lines 5-6).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 25, 26, 35, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,747,995).

Brown et al. discloses the claimed limitations above. Brown et al. does not disclose the following features: regarding claim 25, wherein the module is attachable to a wall; regarding claim 26, wherein the module is at least in part housed within an outlet; regarding claim 35, wherein the module is attachable to a wall; regarding claim 36, wherein the module is at least in part housed within an outlet. However, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Brown et al. by shifting the module (Fig. 1, DERIVED VOICE MODEM 108) in any location of the subscriber premise (Fig. 1), such as the wall or the outlet, in order to provide an efficient and convenient communication system for the users.

7. Claims 63, 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel et al. (US 6,639,913).



Frankel et al. discloses the claimed limitations above. Frankel et al. does not disclose the following features: regarding claim 63, wherein the module is attachable to a wall; regarding claim 64, wherein the module is at least in part housed within an outlet.

However, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Frankel et al. by shifting the module (wire center remote digital terminal in Figs. 8 and 9) in any location of the customer site, such as the wall or the outlet, in order to provide an efficient and convenient communication system for the users.

8. Claims 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel et al. (US 6,639,913) in view of Brown et al. (US 6,747,995).

Frankel et al. discloses the claimed limitations above. Frankel et al. does not disclose the following features: regarding claim 65, wherein at least one of said wiring segments concurrently carries a frequency domain multiplexed second analog telephone signal in a telephone band, and the module further comprises: a frequency selective means couplable to the wiring and operative to isolate said second analog telephone signal; and a second telephone connector coupled to said frequency selective means and operative to couple a telephone device to said second analog telephone signal; regarding claim 66, wherein the multiplexed digitized voice channels carry Pulse Code Modulation PCM signals; regarding claim 67, wherein at least one of said wiring segments further carries data signals, and the module further comprises a data connector operative to couple a data unit to the data signals. Brown et al. discloses a system for multiple voice lines over single subscriber loop comprising the following features: regarding claim 65, wherein at least one of said wiring segments concurrently carries a frequency domain multiplexed second analog telephone signal (column 12, lines 39-44) in a telephone band, and

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the module further comprises: a frequency selective means (Fig. 6 PF 116) couplable to the wiring and operative to isolate said second analog telephone signal; and a second telephone connector coupled to said frequency selective means (Fig. 6 PF 116) and operative to couple a telephone device (telephone 114) to said second analog telephone signal; regarding claim 66, wherein the multiplexed digitized voice channels carry Pulse Code Modulation PCM (ABSTRACT; COLUMN 11, LINE 44 TO COLUMN 12, LINE 32) signals; regarding claim 67, wherein at least one of said wiring segments (Fig. 6, wire 606) further carries data signals, and the module further comprises a data connector (Fig. 6, E-NET CTRLR 605) operative to couple a data unit (Fig. 6, data terminal 112) to the data signals. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Frankel et al., by using the features, as taught by Brown et al., in order to provide an efficient data communication by reducing the loss and impairments found in conventional systems resulting from the analog path between the telephone instrument and the CO switch. See Brown et al., column 4, lines 56-59.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gerszberg et al. (US 6,714,534) discloses a system architecture.

Lewin et al. (US 6,680,940) discloses a system for transporting frames.

Zakrzewski et al. (US 6,539,081) discloses an autbaud mechanism.

Barzegar et al. (US 6,347,075) discloses a circuit to provide backup telephone service.

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Amit (US 6,005,873) discloses a communication apparatus.

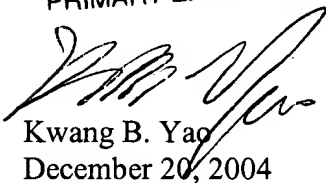
McHale et al. (US 5,898,761) discloses a communication server apparatus.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER



Kwang B. Yao  
December 20, 2004